

10 CSR 10-6.220

**Restriction of Emission of Visible Air
Contaminants**

- (1) Applicability. This rule applies to all sources of visible emissions throughout the state of Missouri with the exception of the following:
- (A) Internal combustion engines operated outside the Kansas City or St. Louis metropolitan areas and stationary internal combustion engines operated in the Kansas City or St. Louis metropolitan areas;
 - (B) Wood burning stoves or fireplaces used for heating;
 - (C) Fires used for recreational or ceremonial purposes or fires used for the noncommercial preparation of food by barbecuing;
 - (D) Fires used solely for the purpose of fire-fighter training;
 - (E) Smoke generating devices when a required permit (under 10 CSR 10-6.060 or 10 CSR 10-6.065) has been issued or a written determination that a permit is not required has been obtained;
 - (F) The pyrolysis of wood for the production of charcoal in batch-type charcoal kilns (Emissions from batch-type charcoal kilns shall comply with the requirements of 10 CSR 10-6.330 Restriction of Emissions From Batch-Type Charcoal Kilns);
 - (G) Truck dumping of nonmetallic minerals into any screening operation, feed hopper or crusher;
 - (H) Emission sources regulated by 40 CFR part 60 and 10 CSR 10-6.070;
 - (I) Any open burning that is exempt from applicable open burning rules 10 CSR 10-2.100, 10 CSR 10-3.030, 10 CSR 10-4.090 and 10 CSR 10-5.070; and
 - (J) Incinerators used to burn refuse in the outstate area of Missouri.

(2) Definitions.

- (A) Capacity factor – Ratio (expressed as a percentage) of a power generating unit's actual annual electric output (expressed in Mwe hr) divided by the unit's nameplate capacity multiplied by 8,760 hours.
- (B) Continuous Opacity Monitoring System (COMS) – All equipment required to continuously measure and record the opacity of emissions within a stack or duct. Continuous Opacity Monitoring Systems consist of sample interface, analyzer and data recorder components and usually include, at a minimum: transmissometers, transmissometer control equipment, and data transmission, acquisition, and recording equipment.
- (C) Opacity – The extent to which airborne material obstructs the transmission of incident light and obscures the visual background. Opacity is stated as a percentage of light obstructed and can be measured by a continuous opacity monitoring system or a trained observer. An opacity of one hundred percent (100%) represents a condition in which no light is transmitted, and the background is completely obscured.
- (D) Outstate area – Any area throughout the state except the City of St. Louis and St. Charles, St. Louis, Jefferson, Franklin, Clay, Cass, Buchanan, Ray, Jackson, Platte and Greene Counties.
- (E) Six-minute period – A three hundred sixty (360) consecutive second time interval. Six-minute block averages per 40 CFR part 60, Performance Specification 1 shall be utilized for COMS data.
- (F) Smoke generating device – A specialized piece of equipment which is not an integral part of a commercial, industrial or manufacturing process and whose sole purpose is the creation and dispersion of fine solid or liquid particles in a gaseous medium.

- (G) Source – Any part or activity of an installation that emits or has the potential to emit any regulated air pollutant.
- (H) Definitions of certain terms specified in this rule, other than those specified in this rule section, may be found in 10 CSR 10-6.020.

(3) General Provisions.

- (A) Maximum Visible Emissions Limitations. Unless specified otherwise in this rule, no owner or other person shall cause or permit to be discharged into the atmosphere from any source, not exempted under this rule, any visible emissions greater than the limitations in the following table:

| Area of State | Visible Emission Limitations | |
|--------------------------------|------------------------------|-------------|
| | Existing Sources | New Sources |
| Kansas City Metropolitan Area | 20% | 20% |
| St. Louis Metropolitan Area | 20%* | 20% |
| Springfield-Greene County Area | 40% | 20% |
| Outstate Area | 40% | 20% |

- * Exception: Existing sources in the St. Louis metropolitan area that are not incinerators and emit less than twenty-five (25) lbs/hr of particulate matter shall be limited to forty percent (40%) opacity

- (B) Visible Emissions Limitations, Exceptions Allowed In One Six-Minute Period. The visible emissions limitations in the following table shall be allowed for a period not aggregating more than one six-minute period in any sixty (60) minutes:

| Area of State | Visible Emission Limitations, Exceptions | |
|-----------------------------------|---|-------------|
| | Existing Sources | New Sources |
| Kansas City Metropolitan Area | 60%** | 60%** |
| St. Louis Metropolitan Area | 40% | 40% |
| Springfield-Greene County Area | 60%** | 60%** |
| Outstate Area | 60% | 60% |

- ** This exception does not apply to existing and new incinerators in the Kansas City metropolitan area and Springfield-Greene County.
- (C) Visible emissions over the limitations shown in subsection (3) (B) of this rule are in violation of this rule unless the director determines that the excess emissions do not warrant enforcement action based on data submitted under 10 CSR 10-6.050 Start-Up, Shutdown and Malfunction Conditions.
- (D) Failure to meet the requirements of subsection (3) (A) solely because of the presence of uncombined water shall not be a violation of this rule.
- (E) The following emission sources shall have COMS installed, calibrated, maintained and operated in accordance with 40 CFR part 60, Performance Specification 1:
1. Coal-fired steam generating units with maximum heat input rate greater than two hundred fifty (250) million British thermal units (Btus)/hour. Exemption: Coal-fired steam generating units that have an annual boiler capacity factor of thirty percent (30%) or less are exempt from this requirement;
 2. Portland cement calcining kiln operations; and

3. Sources that require COMS under 10 CSR 10-6.070 New Source Performance Regulations.
- (F) All sources that do not fall under the requirements of subsection (3)(E) of this rule shall have the opacity of visible emissions determined by one of the methods in section (5) of this rule.
- (G) Compliance Determination. Compliance for any source to which this rule applies shall be determined from opacity measurements taken in accordance with subsection (3)(E) or (3)(F) of this rule. If a COMS is malfunctioning, a non-department qualified observer measurement may be used as a temporary substitute. If opacity measurements taken by a non-department qualified observer differ from visual measurements taken by a qualified department observer, the qualified department observer's opacity measurements shall be used to determine compliance.
- (H) Continuous Opacity Monitoring Systems (COMS) General Requirements.
1. Source operating time includes any time fuel is being combusted and/or a fan is being operated.
 2. Cycling time. Cycling times include the total time a monitoring system requires to sample, analyze and record an emission measurement. Continuous monitoring systems for measuring opacity shall complete a minimum of one (1) cycle of operation (sampling, analyzing and data recording) for each successive ten-second period.
 3. Certification. All COMS shall be certified by the director after review and acceptance of a demonstration of conformance with 40 CFR Part 60, Appendix B, Performance Specification 1.
 4. Audit authority. All COMS shall be subject to audits conducted by the department, and all COMS records shall be made available upon request to department personnel.

5. Alternative monitoring methods. All alternative monitoring systems requirements, system locations and procedures for operation and maintenance which do not meet the requirements of this rule must be approved by the staff director. Submittals for approval determination must—

A. Demonstrate that a requirement of subsection (3)(H), (4)(A) and/or (4)(B) of this rule cannot be practically met; and

B. Demonstrate that the alternative produces results that adequately verify compliance.

(I) Time Schedule for Compliance.

1. All new sources shall comply when operations begin; and

2. All existing sources shall comply as of the effective date of this rule.

(4) Reporting and Record Keeping.

(A) COMS Reporting. Owners or operators of sources required to install COMS shall submit a quarterly written report to the director. All quarterly reports shall be postmarked no later than the thirtieth day following the end of each calendar quarter and shall include the following emissions data:

1. A summary including total time for each cause of excess emissions and/or monitor downtime;

2. Nature and cause of excess emissions, if known;

3. The six-minute average opacity values greater than the opacity emission requirements (The average of the values shall be obtained by using the procedures specified in the Reference Method used to determine the opacity of the visible emissions);

4. The date and time identifying each period during which the COMS was inoperative (except for zero and span checks), including the nature and frequency of system repairs or adjustments that were made during these times; and
5. If no excess emissions have occurred during the reporting period and the COMS has not been inoperative, repaired or adjusted, this information shall be stated in the report.

(B) COMS Records to be Maintained. Owners or operators of affected sources shall maintain a file (hard copy or electronic version) of the following information for a minimum of two (2) years from the date the data was collected:

1. All information reported in the quarterly summaries; and
2. All six-minute opacity averages and daily Quality Assurance (QA)/Quality Control (QC) records.

(5) Test Methods.

(A) Emissions from Stationary Sources – Use one of the following four (4) methods:

1. Qualified observer in accordance with 10 CSR 10-6.030(9), Reference Method 9 – Visual Determination of the Opacity of Emissions from Stationary Sources;
2. Qualified observer in accordance with proposed Test Method 203A – Visual Determination of Opacity of Emissions from Stationary Sources for Time-Averaged Regulations (as proposed in the November 22, 1993 *Federal Register*, Volume 58, pp. 61640-61649);
3. Qualified observer in accordance with proposed Test Method 203B – Visual Determination of

Opacity of Emissions from Stationary Sources for Time-Exception Regulations (as proposed in the November 22, 1993 *Federal Register*, Volume 58, pp. 61640-61649); or

4. Continuous Opacity Monitoring System that complies with and is installed, calibrated, maintained and operated in accordance with proposed Test Method 203 – Visual Determination of the Opacity of Emissions from Stationary Sources by Continuous Opacity Monitoring Systems (as proposed in the October 7, 1992 *Federal Register*, Volume 57, pp. 46114-46119).
- (B) Emissions from Mobile Internal Combustion Engines – Use a qualified observer in accordance with 40 CFR part 60, Appendix A – Reference Methods, Method 22 – Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares.
- (C) Fugitive Emissions from Material Sources, Smoke Emissions from Flares and As Required by Permit Condition – Use a qualified observer in accordance with 40 CFR part 60, Appendix A – Reference Methods, Method 22 – Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares.

EPA Rulemakings

CFR: 40 C.F.R. 52.1320 (c)

FRM: 68 FR 12827 (03/18/2003)

PRM: 68 FR 12886 (03/18/2003)

State Submission: 11/08/2002

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APDB File: MO-207

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State Final: 10 C.S.R. 10-6 (10/31/99)

APDB File: MO-162

Description: This rule establishes new statewide visible emissions regulations and consolidates the following old area specific rules: 10-2.060, 10-3.080, 10-4.060 and 10-5.090.

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Difference Between the State and EPA-Approved Regulation

None.